<u>**Listing of Claims:**</u>

1. (Currently Amended) A method for performing ~~synchronisation~~ synchronization of a mobile network device ~~(2)~~ to a network control device ~~(1)~~ of a present radio network region ~~(CST)~~, comprising the steps of:

detecting ~~(S1)~~ a source radio network region ~~(CS1 to CS8)~~ from which a handover of said mobile network device ~~(2)~~ to said present radio network region ~~(CST)~~ has been performed[[,]];

determining ~~(S2, S3)~~ a start propagation delay value ~~(SPV1 to SPV8;~~ ~~SPV1_1 to SPV1_5)~~ based on said detected source radio network region ~~(CS1 to~~ ~~CS8)~~ of said mobile station ~~(2)~~[[,]]; and

searching ~~(S4)~~ an actual propagation delay value by using a search strategy based on said determined start propagation delay value ~~(SPV1 to SPV8;~~ ~~SPV1_1 to SPV1_5)~~.

2. (Currently Amended) The method ~~according to~~ of claim 1, wherein start <u>propagation delay values are stored in a database</u> for a plurality of adjacent sectors ~~(CS1 to CS8) start~~ ~~propagation delay values (SPV1 to SPV8; SPV1_1 to SPV1_5) are stored in a database (14; 14')~~.

3. (Currently Amended) The method ~~according to~~ of claim 2, further comprising the step of:

updating ~~(S6)~~ said database ~~(14; 14')~~ with said searched actual propagation delay value after performing said search step.

4. (Currently Amended) The method ~~according to~~ of claim 3, wherein <u>one start propagation value is stored</u> for each adjacent sector ~~(CS1 to CS8)~~ ~~one start propagation value (SPV1 to SPV8) is stored~~.

5. (Currently Amended) The method ~~according to~~ of claim 3, wherein for each adjacent sector ~~(CS1 to CS8)~~ a plurality of start propagation values ~~(SPV1_1 to SPV1_5)~~ are used and an average of said plurality of start propagation values ~~(SPV1_1 to SPV1_5)~~ is used as ~~the~~ <u>a</u> basis for said search strategy.

6. (Currently Amended) The method ~~according to~~ of claim 5, wherein a distribution of said plurality of start propagation values ~~(SPV1_1 to SPV1_5)~~ is also used as the basis for said search strategy.

7. (Currently Amended) The method ~~according to~~ of claim 1, wherein said search strategy is expanding window.

8. (Currently Amended) The method ~~according to~~ of claim 1, wherein said search strategy is z-search.

9. (Currently Amended) A network control device of a present radio network region ~~(CST)~~, comprising<u>:</u>

a detecting means (11) for detecting a source radio network region

(CS1-CS8) from which a handover of a mobile network device (2) to the present

radio network region (CST) has been performed[[,]];

a determining means (12, 14) for determining a start propagation delay

value (SPV1 to SPV8; SPV1_1 to SPV1_5) based on said detected source radio

network region (CS1 to CS8) of said mobile station (2)[[,]]; and

a search means (13) for searching an actual propagation delay value by

using a search strategy based on the determined start propagation delay value

(SPV1 to SPV8; SPV1_1 to SPV1_5).

10. (Currently Amended) The device according to of claim 9, further comprising:

a database (14; 14') in which for a plurality of adjacent sectors (CS1 to

CS8) start propagation delay values (SPV1 to SPV8; SPV1_1 to SPV1_5) are

stored for a plurality of adjacent sectors[[,]];

wherein said determining means (12) accesses said database (14).

11. (Currently Amended) The device according to of claim 10, further comprising:

an updating means (17) for updating said database with the current

propagation delay value detected by said search means (13).

12. (Currently Amended) The device according to of claim 11, wherein one start

propagation value is stored in said database for each adjacent sector (CS1 to CS8) one start

propagation value (SPV1 to SPV8) is stored in said database (14).

4

13. (Currently Amended) The device ~~according to~~ of claim 11, wherein for each adjacent sector ~~(CS1 to CS8)~~ a plurality of start propagation values ~~(SPV1_1 to SPV1_5)~~ are stored in said database ~~(14')~~ and said updating means ~~(17)~~ is adapted to use an average of said plurality of start propagation values ~~(SPV1_1 to SPV1_5)~~ as ~~the~~ a basis for said search strategy.

14. (Currently Amended) The device ~~according to~~ of claim 13, wherein a distribution of said plurality of start propagation values ~~(SPV1_1 to SPV1_5)~~ is also used as the basis for said search strategy.

15. (Currently Amended) The device ~~according to~~ of claim 9, wherein said search strategy is expanding window.

16. (Currently Amended) The device ~~according to~~ of claim 9, wherein said search strategy is z-search.